

Table 10: **Tat**

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
Tat(1–20)	Tat(1–20 LAI)	MEPVDPRLEPWKHPG-SQPKT	Vaccine	murine(H-2 ^d)	[Hinkula1997]
Vaccine: <i>Vector/type:</i> DNA <i>Strain:</i> LAI <i>HIV component:</i> Nef, Tat, Rev <ul style="list-style-type: none"> Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev 					
Tat(16–35)	Tat(16–35 LAI)	SQPKTACTTCYCKKC-CFHCQ	Vaccine	murine(H-2 ^d)	[Hinkula1997]
Vaccine: <i>Vector/type:</i> DNA <i>Strain:</i> LAI <i>HIV component:</i> Nef, Tat, Rev <ul style="list-style-type: none"> Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev 					
Tat(17–32)	Tat(17–32)	QPKTACTNCYCKRCCF	HIV-1 infection	human()	[Ranki1997]
<ul style="list-style-type: none"> T-cell response to this epitope persisted after seroreversion 					
Tat(31–50)	Tat(31–50 LAI)	CFHCQVCFTTKALGIS-YGRK	Vaccine	murine(H-2 ^d)	[Hinkula1997]
Vaccine: <i>Vector/type:</i> DNA <i>Strain:</i> LAI <i>HIV component:</i> Nef, Tat, Rev <ul style="list-style-type: none"> Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev 					
Tat(33–48)	Tat(33–48)	HCQVCFMTKGLGISYG	HIV-1 infection	human()	[Ranki1997]
<ul style="list-style-type: none"> T-cell response to this epitope persisted after seroreversion 					
Tat(46–65)	Tat(46–65 LAI)	SYGRKKRRQRRPPQ-GSQTH	Vaccine	murine(H-2 ^d)	[Hinkula1997]
Vaccine: <i>Vector/type:</i> DNA <i>Strain:</i> LAI <i>HIV component:</i> Nef, Tat, Rev <ul style="list-style-type: none"> Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev 					
Tat(61–80)	Tat(61–80 LAI)	GSQTHQVSLSKQPTSQ-PRGD	Vaccine	murine(H-2 ^d)	[Hinkula1997]
Vaccine: <i>Vector/type:</i> DNA <i>Strain:</i> LAI <i>HIV component:</i> Nef, Tat, Rev <ul style="list-style-type: none"> Stronger, broader responses were observed in animals vaccinated with DNA epidermally; rather than with intramuscular protein 					

- Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev

Tat(67–86)	Tat(67–86 LAI)	VSLSKQPTSQPRGDPT-GPKE	Vaccine	murine(H-2 ^d)	[Hinkula1997]
Vaccine: <i>Vector/type:</i> DNA <i>Strain:</i> LAI <i>HIV component:</i> Nef, Tat, Rev <ul style="list-style-type: none"> • Stronger, broader responses were observed in animals vaccinated with DNA epidermally rather than with intramuscular protein • Some proliferative response to vaccination was observed to peptides throughout Nef and Tat, less for Rev 					
Tat()	Tat()		Vaccine	human()	[Calarota1999a]
Vaccine: <i>Vector/type:</i> DNA <i>HIV component:</i> Nef, Tat, Rev <ul style="list-style-type: none"> • Nine HIV-1+ subjects were given one of three DNA vaccinations for nef, rev or tat, and novel proliferative and CTL responses were generated • The nef DNA immunization induced the highest and most consistent CTLp activity, IFN-γ production, and IL-6 and IgG responses • Highly active antiretroviral treatment (HAART) did not induce new HIV-specific CTL responses but reduced viral load, while DNA vaccination induced new immune responses but did not reduce viral load – thus this is a potentially complementary and promising combination 					
Tat()	Tat()		HIV-1 infection, Vaccine	human()	[Calarota2001]
Vaccine: <i>Vector/type:</i> DNA <i>HIV component:</i> Nef, Rev, Tat <i>Stimulatory Agents:</i> CpG motifs <ul style="list-style-type: none"> • This review discusses the cellular immune response, and comments on CpG induction of Th1 cytokines and enhanced immune responses, and HIV-1 DNA vaccine boosting of CTL and Th proliferative responses in asymptomatic HIV+ individuals 					
Tat()	Tat()		Vaccine	murine(H-2 ^d)	[BillautMulot2001]
Vaccine: <i>Vector/type:</i> DNA with DNA boost, DNA with recombinant protein boost <i>Strain:</i> LAI <i>HIV component:</i> Gag, Tat, Nef <i>Stimulatory Agents:</i> IL-18 <ul style="list-style-type: none"> • DNA vaccinated BALB/c mice primed and boosted with a multiepitopic vaccine with IL-18 gave lymphoproliferative responses 7 weeks post immunization • Strong but non-lasting HIV-specific CTL responses were detected by a Cr-release assay and DNA prime + DNA boost was more effective than DNA prime + protein boost • Immunization with either the multiepitopic DNA or with the mixed DNA vaccine resulted in Th1 cytokines production (IL-2 and IFNγ) in spleen cell cultures stimulated by Tat and Gag, while Th2 cytokines IL-4 and IL-10 production was not detectable • Co-administration of IL-18 increased T-cell responses but decreased anti-HIV antibody levels 					